AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A device for processing ~~recording device recording~~ data recorded on an optical recording medium, comprising:

a pickup unit to detect a signal reflected from the optical recording medium, the optical recording medium including data formed in a ~~the form of~~ marked phase and an unmarked phase ~~on a recording medium~~, a minimum length of the marked phase or unmarked phase being shorter than 3T ~~2T~~, T being a channel bit clock; and

a signal processor to process the signal output from the pickup unit, thereby to output a binary signal which includes data corresponding to the minimum length.

2. (Currently Amended) A recording medium comprising:~~,~~

a recording layer; and

data recorded in a marked phase and an unmarked phase on the recording layer,

wherein a minimum length of the marked phase is shorter than 3T, T being a channel bit clock.

3. (Currently Amended) ~~A~~ The recording medium of claim 2, wherein the minimum length of the marked phase is 2T.

4. (Cancelled)

5. (New) The device of claim 1, where the signal processor includes:

a signal detector to detect a high-frequency signal reproduced from the pickup unit, to convert the high-frequency signal into a binary signal by comparing the reproduced signal with a reference signal, and to output the binary signal;

a data converter to synchronize a reference clock with the binary signal from the signal detector and to restore the binary signal from the signal detector into a bit stream using the synchronized reference clock; and

a demodulator to restore the bit stream into original data.

6. (New) The device of claim 5, wherein the signal detector includes:

a comparator to compare the reproduced signal with at least two reference signals and to output a plurality of binary signals; and

a selector to select one of the plurality of binary signals.

7. (New) The device of claim 1, wherein the minimum length of the marked phase is 2T.

8. (New) A method for reproducing data recorded in an optical recording medium, comprising the steps of:

(a) converting a high-frequency signal reproduced from the optical recording medium into a binary signal by comparing the

reproduced signal with a reference signal, the high-frequency signal including a signal corresponding to a minimum length of mark or space, the minimum length of the mark or space being shorter than 3T, T being a channel bit clock; and

(b) synchronizing a reference clock with the binary signal and restoring the binary signal into a bit stream using the synchronized reference clock.

9. (New) The method of claim 8, wherein the minimum length of the mark or space is 2T or is shorter than the radius of a beam spot.

10. (New) The method of claim 8, wherein the step (a) comprises the steps of:

(a1) comparing the reproduced signal with a plurality of reference signals and outputting a plurality of binary signals based on the comparison results; and

(a2) selecting one of the plurality of binary signals.